

The user interface of the present invention is specifically adapted to be used with a small computer unit where the size of the touch sensitive area is in the order of 2-3 inches. The user interface is also adapted to be operated by one hand, where the object can be a finger, such as the thumb, of a user of the computer unit.

Advantages

Those advantages that can be primarily associated with a user interface or a computer readable medium according to the present invention reside in the ability to establish a user-friendly interface for small handheld computers, both regarding general application set-up functions, text input functions, and file and task management.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will now be described in more detail with reference to the accompanying drawings, in which

FIG. 1 is a schematic and highly simplified view of a touch sensitive area on a mobile handheld computer unit;

FIG. 2 is a schematic side view illustrating the activation of a function;

FIG. 3 is a schematic illustration of a first function;

FIG. 4 is a schematic side view illustrating the selection of a service or setting represented by an icon;

FIG. 5 is a schematic illustration of a second function;

FIG. 6 is a schematic side view illustrating the selection of a third function;

FIG. 7 is a schematic illustration of an application or file;

FIG. 8 is a schematic illustration on how navigation is performed;

FIG. 9 is a schematic illustration of how the content of the display are is changed;

FIG. 10 is a schematic side view further illustrating how navigation is performed;

FIG. 11 is a schematic illustration of moving forwards in an application;

FIG. 12 is a schematic illustration of moving backwards in, or closing, an application;

FIG. 13 is a schematic illustration of an enclosure

FIG. 14 shows a computer readable medium in the form of a solid state memory.

DESCRIPTION OF EMBODIMENTS AT PRESENT PREFERRED

FIG. 1 illustrates a user interface for a mobile handheld computer unit. The user interface according to the present invention is specifically adapted to computer units comprising a touch sensitive area 1, which is divided into a menu area 2 and a display area 3. It should be understood that there are several different kinds of known touch sensitive displays and that the present invention does not depend on what kind of touch sensitive display that is used in relation to the inventive user interface.

The computer unit is adapted to run several applications simultaneously and to present an active application on top of any other application on the display area 3. It should be understood that by simultaneously it is meant any technology that will make it appear to a user of the computer unit that applications are run simultaneously and that the present invention does not depend on how this is realised, whether it is through time-sharing of one processor, parallel use of several processors, or any other technique.

According to the present invention the menu area 2 is adapted to present a representation of a first 21, a second 22 and a third 23 predefined function.

The first function 21 is a general application dependent function, the second function 22 is a keyboard function, and the third function 23 is a task and file manager.

FIG. 2 shows that any one of these three functions 21, 22, 23 can be activated when the touch sensitive area 1 detects a movement of an object 4 with its starting point A within the representation of a function on the menu area 2 and with a direction B from the menu area 2 to the display area 3.

FIG. 3 shows that if the first function 21 is activated, then the display area 3 is adapted to display icons 211, 212, 213, 214, 215, 216 representing services or functions depending on the current active application. One of the icons, in the figure exemplified by icon 211, always represents a "help"-service, regardless of application. Any key that, because of lack of space on the display area, or because the key should be hidden from the active application, or because of any other reason is not shown on the display area of an active application, can be represented by one of the icons 212, 213, 214, 215, 216 that is shown when the first function 21 is activated.

If for instance the active application handles a picture, then the icons that are shown when the first function is activated can be services such as "save to disk", "send as SMS", or "delete" and they can be settings such as "resolution", "colour", or "brightness".

If no application is currently active on the computer unit, then the icons 211, 212, 213, 214, 215, 216 are adapted to represent services or settings of the operations system of the computer unit, such as background picture, clock, alarm 215, users 213, help 211, etc.

FIG. 4 shows that selection of a preferred service or setting is done by tapping C, D on corresponding icon 213.

FIG. 5 shows that if the second function 22 is activated, then the display area 3 is adapted to display a keyboard 221 and a text field 222.

Two different scenarios can be at hand when this function key is activated. A first scenario can be that a text passage in the active application is highlighted as the second function is activated. If this is the case then the highlighted text passage is displayed in the text field 222 for editing through the keyboard 221.

The highlighted text passage is replaced by the edited text passage when the second function 21 is deactivated.

A second scenario can be that no text passage in the active application is highlighted. If this is the case then the text field 222 is available for inputting and editing of text through the keyboard 221.

In the case of the latter scenario, the first function 21 can be activated, or the second function 22 can be closed. If the second function 22 is closed then a choice of saving or deleting the inputted text is given, where the choice of saving the inputted text results in an activation of the first function 21.

As the first function 21 is activated with the second function 22 as currently active application the first function 21 will present services or settings available for the inputted text, such as saving the inputted text for later use, using the inputted text as telephone number in a telephone application, or sending the inputted text as message in communications application, such as e-mail, SMS, or fax.

FIG. 6 shows that if the third function 23 is activated, then the display area 3 is adapted to display a list 231 with a library of available applications and files on the computer unit.

A selection of an application will start the application, and a selection of a file will open the file in an application intended